

[This question paper contains 4 printed pages.]

Sr. No. of Question Paper : 5136

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Your Roll No.....

Unique Paper Code : 234151

Name of the Paper : B.A. CAT-I : Computer Fundamentals

Name of the Course : B.A. Programme – Computer Application

Semester : I

Duration : 3 Hours

Maximum Marks : 45

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Section A is compulsory.
3. Attempt any **three** questions from Section B.
4. Parts of a question must be answered together.

SECTION A

1. (a) Give full forms of : BIOS, CMOS (2)
- (b) Write the largest digit in the following number systems :
 - (i) Octal
 - (ii) Hexadecimal (2)
- (c) Explain in one sentence the purpose served by the following system utilities :
 - (i) Disk partitioning
 - (ii) Backup utility (2)
- (d) Explain the working of an optical mouse. (2)

P.T.O.

- (e) Arrange the memories in increasing order of speed :
- (i) Register
 - (ii) RAM
 - (iii) Hard Disk
 - (iv) Magnetic tape
 - (v) Cache Memory (2)
- (f) Why is a communication protocol needed in a network ? (2)
- (g) List any two uses of Internet. (2)
- (h) Name a device which is used for input as well as output. (1)

SECTION B

2. (a) Describe the functions of following registers :
- (i) MAR
 - (ii) Accumulator (2)
- (b) Give examples of two secondary storage devices. Explain these two devices briefly. (4)
- (c) Name the three kinds of buses which comprise the system bus. Which bus carries the information that data is to be read from or written to memory ? (2)
- (d) Name the port used to connect :
- (i) Old Peripheral devices such as printers
 - (ii) Mouse or Keyboard (2)

3. (a) Convert the following into decimal numbers :
- (i) $(101101.10)_2$
 - (ii) $(17.76)_8$
 - (iii) $(3FE)_{16}$ (6)
- (b) Convert into binary numbers :
- (i) $(267)_8$
 - (ii) $(2AB)_{16}$ (2)
- (c) What is an operating system ? Give two examples. (2)
4. (a) Describe the features and working of a touch screen. (3)
- (b) Name an application each of :
- (i) OMR
 - (ii) MICR (2)
- (c) Draw the memory hierarchy of different memory types in a computer. Also, mention how various factors vary across this hierarchy. (3)
- (d) Describe any two kinds of ROM available. (2)
5. (a) Define the following terms :
- (i) Seek time
 - (ii) Cache hit (2)
- (b) What do you understand by "volatile memory" ? Give an example of volatile memory explaining it briefly. (4)
- (c) What is the purpose of Inter Record Gap in a magnetic tape ? (2)

- (d) Name the four areas that are created when the disk is formatted using FAT. (2)
6. (a) Why is an optical disk slower than hard disk. (2)
- (b) Explain the importance of networking. (2)
- (c) Write short notes on :
- (i) WWW
 - (ii) URL
 - (iii) E-mail message format (6)